

**PCT****REQUEST**

The undersigned requests that the present international application be processed according to the Patent Cooperation Treaty.

For receiving Office use only

International Application No.

International Filing Date

Name of receiving Office and "PCT International Application"

Applicant's or agent's file reference  
(if desired) (12 characters maximum) 3220-75156
**Box No. I TITLE OF INVENTION**  
**CONJUGATES AND USE THEREOF**
**Box No. II APPLICANT** This person is also inventor

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

**PURDUE RESEARCH FOUNDATION**  
 3000 Kent Avenue  
 West Lafayette, IN 47906  
 US

Telephone No.  
**(765) 494-2610**Facsimile No.  
**(765) 496-1277**

Teleprinter No.

Applicant's registration No. with the Office

State (that is, country) of nationality:  
USState (that is, country) of residence:  
US

This person is applicant  all designated States  all designated States except the United States of America  the United States of America only  the States indicated in the Supplemental Box

**Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)**

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

LOW, Philip Stewart  
 5850 Farm Ridge Road  
 West Lafayette, IN 47906  
 US

This person is:

- applicant only
- applicant and inventor
- inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality:  
USState (that is, country) of residence:  
US

This person is applicant  all designated States  all designated States except the United States of America  the United States of America only  the States indicated in the Supplemental Box

Further applicants and/or (further) inventors are indicated on a continuation sheet.

**Box No. IV AGENT OR COMMON REPRESENTATIVE; OR ADDRESS FOR CORRESPONDENCE**

The person identified below is hereby/has been appointed to act on behalf of the applicant(s) before the competent International Authorities as:

 agent common representative

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)

ADDISON, Bradford G.  
 BARNE & THORNBURG  
 11 South Meridian Street  
 Indianapolis, IN 46204  
 US

Telephone No.  
**(317) 236-1313**Facsimile No.  
**(317) 231-7433**

Teleprinter No.

Agent's registration No. with the Office  
**41486**

Address for correspondence: Mark this check-box where no agent or common representative is/has been appointed and the space above is used instead to indicate a special address to which correspondence should be sent.

**Continuation of Box No. III FURTHER APPLICANT(S) AND/OR (FURTHER) INVENTOR(S)***If none of the following sub-boxes is used, this sheet should not be included in the request.*

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

VARGHESE, Bindu  
50 Bridgewater Court, Apt. 7  
West Lafayette, IN 47906  
US

This person is:

- applicant only  
 applicant and inventor  
 inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality:  
USState (that is, country) of residence:  
US

This person is applicant for the purposes of:  all designated States  all designated States except the United States of America  the United States of America only  the States indicated in the Supplemental Box

Name and address: (Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country. The country of the address indicated in this Box is the applicant's State (that is, country) of residence if no State of residence is indicated below.)

This person is:

- applicant only  
 applicant and inventor  
 inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

State (that is, country) of nationality:

State (that is, country) of residence:

This person is applicant for the purposes of:  all designated States  all designated States except the United States of America  the United States of America only  the States indicated in the Supplemental Box

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- applicant only  
 applicant and inventor  
 inventor only (If this check-box is marked, do not fill in below.)

Applicant's registration No. with the Office

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Further applicants and/or (further) inventors are indicated on another continuation sheet.

**Box No. V DESIGNATIONS**

The filing of this request constitutes under Rule 4.9(a), the designation of all Contracting States bound by the PCT on the international filing date, for the grant of every kind of protection available and, where applicable, for the grant of both regional and national patents.

However,

- DE Germany is not designated for any kind of national protection
- KR Republic of Korea is not designated for any kind of national protection
- RU Russian Federation is not designated for any kind of national protection

(The check-boxes above may be used to exclude (irrevocably) the designations concerned in order to avoid the ceasing of the effect, under the national law, of an earlier national application from which priority is claimed. See the Notes to Box No. V as to the consequences of such national law provisions in these and certain other States.)

**Box No. VI PRIORITY CLAIM**

The priority of the following earlier application(s) is hereby claimed:

Filing date of earlier application (day/month/year)	Number of earlier application	Where earlier application is:		
		national application: country or Member of WTO	regional application:*	international application: receiving Office
item (1) 06 May 2003 (06.05.04)	60/468.330	US		
item (2)				
item (3)				

- Further priority claims are indicated in the Supplemental Box.

The receiving Office is requested to prepare and transmit to the International Bureau a certified copy of the earlier application(s) (*only if the earlier application was filed with the Office which for the purposes of this international application is the receiving Office*) identified above as:

- all items
- item (1)
- item (2)
- item (3)
- other, see Supplemental Box

\* Where the earlier application is an ARIPO application, indicate at least one country party to the Paris Convention for the Protection of Industrial Property or one Member of the World Trade Organization for which that earlier application was filed (Rule 4.10(b)(ii)): .....

**Box No. VII INTERNATIONAL SEARCHING AUTHORITY**

Choice of International Searching Authority (ISA) (if two or more International Searching Authorities are competent to carry out the international search, indicate the Authority chosen; the two-letter code may be used):

ISA / EP.....

Request to use results of earlier search; reference to that search (if an earlier search has been carried out by or requested from the International Searching Authority):

Date (day/month/year) Number Country (or regional Office)

**Box No. VIII DECLARATIONS**

The following declarations are contained in Boxes Nos. VIII (i) to (v) (mark the applicable check-boxes below and indicate in the right column the number of each type of declaration):

Number of declarations

- |  |  |     |
|--|--|-----|
| <input type="checkbox"/> Box No. VIII (i)              | Declaration as to the identity of the inventor   | :   |
| <input checked="" type="checkbox"/> Box No. VIII (ii)  | Declaration as to the applicant's entitlement, as at the international filing date, to apply for and be granted a patent             | : 1 |
| <input checked="" type="checkbox"/> Box No. VIII (iii) | Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application | : 1 |
| <input type="checkbox"/> Box No. VIII (iv)             | Declaration of inventorship (only for the purposes of the designation of the United States of America)                               | :   |
| <input type="checkbox"/> Box No. VIII (v)              | Declaration as to non-prejudicial disclosures or exceptions to lack of novelty   | :   |

**Box No. VIII (ii) DECLARATION: ENTITLEMENT TO APPLY FOR AND BE GRANTED A PATENT**

*The declaration must conform to the standardized wording provided for in Section 212; see Notes to Boxes Nos. VIII, VIII (i) to (v) (in general) and the specific Notes to Box No. VIII (ii). If this Box is not used, this sheet should not be included in the request.*

Declaration as to the applicant's entitlement, as at the international filing date, to apply for and be granted a patent (Rules 4.17(ii) and 51bis.1(a)(ii)), in a case where the declaration under Rule 4.17(iv) is not appropriate:

PURDUE RESEARCH FOUNDATION is entitled to apply for and be granted a patent by virtue of the following:

an assignment from

LOW, Philip Stewart and VARGHESE, Bindu

to PURDUE RESEARCH FOUNDATION dated 10 June 2003 (10.06.03).

This declaration is made for the purposes of all designations, except the designation of the United States of America.

This declaration is continued on the following sheet, "Continuation of Box No. VIII (ii)".

**Box No. VIII (iii) DECLARATION: ENTITLEMENT TO CLAIM PRIORITY**

*The declaration must conform to the standardized wording provided for in Section 213; see Notes to Boxes Nos. VIII, VIII (i) to (v) (in general) and the specific Notes to Box No. VIII (iii). If this Box is not used, this sheet should not be included in the request.*

Declaration as to the applicant's entitlement, as at the international filing date, to claim the priority of the earlier application specified below, where the applicant is not the applicant who filed the earlier application or where the applicant's name has changed since the filing of the earlier application (Rules 4.17(iii) and 51bis.1(a)(iii)):

In relation to this International Application:

PURDUE RESEARCH FOUNDATION is entitled to claim priority of earlier application

No. 60/468,330

by virtue of the following:

an assignment from

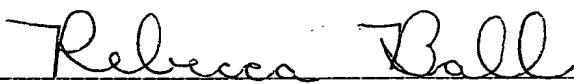
LOW, Philip Stewart and VARGHESE, Bindu to PURDUE RESEARCH FOUNDATION  
dated 10 June 2003 (10.06.03).

This declaration is made for the purposes of all designations, except the designation of  
the United States of America.

This declaration is continued on the following sheet, "Continuation of Box No. VIII (iii)".

**Box No. IX CHECK LIST; LANGUAGE OF FILING**

This international application contains:		This international application is accompanied by the following item(s) (mark the applicable check-boxes below and indicate in right column the number of each item):		Number of items
(a) in paper form, the following number of sheets:				
request (including declaration sheets)	: 6	<input checked="" type="checkbox"/> fee calculation sheet		: 1
description (excluding sequence listing and/or tables related thereto)	: 17	<input type="checkbox"/> original separate power of attorney		:
claims	: 1	<input checked="" type="checkbox"/> original general power of attorney		: 1
abstract	: 1	<input checked="" type="checkbox"/> copy of general power of attorney; reference number, if any: .....		: 2
drawings	: 3	<input type="checkbox"/> statement explaining lack of signature		:
<b>Sub-total number of sheets</b>	<b>28</b>	<input type="checkbox"/> priority document(s) identified in Box No. VI as item(s): .....		:
sequence listing		<input type="checkbox"/> translation of international application into ( <i>language</i> ): .....		:
tables related thereto		<input type="checkbox"/> separate indications concerning deposited microorganism or other biological material		:
(for both, actual number of sheets if filed in paper form, whether or not also filed in computer readable form; see (c) below)		<input type="checkbox"/> sequence listing in computer readable form ( <i>indicate type and number of carriers</i> )		:
<b>Total number of sheets</b>	<b>28</b>	(i) <input type="checkbox"/> copy submitted for the purposes of international search under Rule 13ter only (and not as part of the international application)		:
(b) <input type="checkbox"/> only in computer readable form (Section 801(a)(i))		(ii) <input type="checkbox"/> (only where check-box (b)(i) or (c)(i) is marked in left column) additional copies including, where applicable, the copy for the purposes of international search under Rule 13ter		:
(i) <input type="checkbox"/> sequence listing		(iii) <input type="checkbox"/> together with relevant statement as to the identity of the copy or copies with the sequence listing mentioned in left column		:
(ii) <input type="checkbox"/> tables related thereto				
(c) <input type="checkbox"/> also in computer readable form (Section 801(a)(ii))		10. <input type="checkbox"/> tables in computer readable form related to sequence listing ( <i>indicate type and number of carriers</i> )		:
(i) <input type="checkbox"/> sequence listing		(i) <input type="checkbox"/> copy submitted for the purposes of international search under Section 802(b-quarter) only (and not as part of the international application)		:
(ii) <input type="checkbox"/> tables related thereto		(ii) <input type="checkbox"/> (only where check-box (b)(ii) or (c)(ii) is marked in left column) additional copies including, where applicable, the copy for the purposes of international search under Section 802(b-quarter)		:
Type and number of carriers (diskette, CD-ROM, CD-R or other) on which are contained the		(iii) <input type="checkbox"/> together with relevant statement as to the identity of the copy or copies with the tables mentioned in left column		:
<input type="checkbox"/> sequence listing: .....		11. <input checked="" type="checkbox"/> other ( <i>specify</i> ): Transmittal Letter & Postal Card .....		: 2
<input type="checkbox"/> tables related thereto: .....				
(additional copies to be indicated under items 9(ii) and/or 10(ii), in right column)				
Figure of the drawings which should accompany the abstract:	3	Language of filing of the international application:		English (EN)

**Box No. X SIGNATURE OF APPLICANT, AGENT OR COMMON REPRESENTATIVE**  
*Next to each signature, indicate the name of the person signing and the capacity in which the person signs (if such capacity is not obvious from reading the request).*

  
Rebecca L. BALL, Agent for Applicants

For receiving Office use only			
1. Date of actual receipt of the purported international application:		2. Drawings:	
<input type="checkbox"/>		<input type="checkbox"/> received: <input type="checkbox"/> not received:	
3. Corrected date of actual receipt due to later but timely received papers or drawings completing the purported international application:			
4. Date of timely receipt of the required corrections under PCT Article 11(2):			
5. International Searching Authority (if two or more are competent): ISA /		6. <input type="checkbox"/> Transmittal of search copy delayed until search fee is paid	

For International Bureau use only

Date of receipt of the record copy by the International Bureau:

# PCT

## GENERAL POWER OF ATTORNEY

(for several international applications filed under the Patent Cooperation Treaty)

(PCT Rule 90.5)

The undersigned person(s):

(Family name followed by given name; for a full legal entity, full official designation. The address must include postal code and name of country.)

PURDUE RESEARCH FOUNDATION  
3000 Kent Avenue  
West Lafayette, IN 47906  
US

hereby appoint(s) the following person as:

agent

common representative

Name and address

(Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)

ADDISON, Bradford G.; COFFEY, William R.; STEIN, Arland T.; HARRISON, Nancy J.; CONARD, Richard D.; KULKARNI, Dilip A.; REZEK, Richard A.; HUNT, Paul B.; MICHAEL, Jeffrey A.; BAUER, Shawn D.; POWLICK, Jill T.; HENDERSON, Ronald S.; SWEENEY, James R., II; HAIGH, Christopher E.; BAILEY, Kevin D.; BALL, Rebecca; STEWART, Carli E.; GEIB, Helen; MCLAREN, Kevin L.; PALAN, Perry; NEWMAN, Mark M.; KRINSKY, Richard P.; LAZARUS, Richard B.; GILLENWATER, Bobby B.; COOPER, Gregory S.; DONOVAN, Thomas J.; MARTIN, Alice O.; PETERS, Grant H.; HAMIL, Mark A.; ALLEN, Michael B.; ALBERS, Dan P.; DEVADAS, Sendil; SMITH, Thomas E.; MCWILLIAMS, Dennis; SWEENEY, James R.; LEE, William M., Jr.; OHLSON, Glenn W.; BREZINA, David C.; GRAY, Jeffrey R. all of the law firm: BARNES & THORNBURG, 11 South Meridian Street, Indianapolis, IN 46204, US

to represent the undersigned before

all the competent International Authorities

the International Searching Authority only

the International Preliminary Examining Authority only

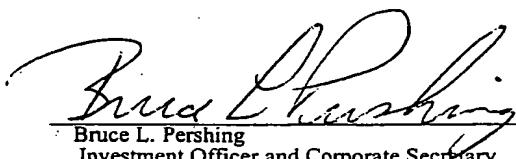
in connection with any and all international applications filed by the undersigned with the following Office

US

as receiving Office

and to make or receive payments on behalf of the undersigned.

Signature(s) (where there are several persons, each of them must sign; next to each signature, indicate the name of the person signing and the capacity in which the person signs, if such capacity is not obvious from reading this power):



Bruce L. Pershing  
Investment Officer and Corporate Secretary

Date: April 16, 2004

# PCT

## GENERAL POWER OF ATTORNEY

(for several international applications filed under the Patent Cooperation Treaty)

(PCT Rule 90.5)

The undersigned person(s) :

(Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)

LOW, Philip Stewart  
5850 Farm Ridge Road  
West Lafayette, IN 47906  
US

hereby appoint(s) the following person as:

agent

common representative

### Name and address

(Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)

LAMMERT, Steven R., Reg. No. 27653; CONARD, Richard D., Reg. No. 27321; COFFEY, William R., Reg. No. 24023; STEIN, Arland T., Reg. No. 25062; HARRISON, Nancy J., Reg. No. 27083; KULKARNI, Dilip A., Reg. No. 27510; REZEK, Richard A., No. 30796; QUICK, David B., Reg. No. 31993; HUNT, Paul B., Reg. No. 37154; MICHAEL, Jeffrey A., Reg. No. 37394; ADDISON, Bradford G., Reg. No. 41486; BAUER, Shawn D., Reg. No. 41603; POWLICK, Jill T., Reg. No. 42088; HENDERSON, Ronald S., Reg. No. 43669; SWEENEY, James R. II, Reg. No. 45670; DuBOIS, Dustin S., Reg. No. 46233; HAIGH, Christopher E., Reg. No. 46377; BAILEY, Kevin D., Reg. No. 46531; BALL, Rebecca, Reg. No. 46535; HUGHES, Dewayne A., Reg. No. 46783; STEWART, Carli E., Reg. No. 51058; GEIB, Helen, Reg. No. 50924; PALAN, Perry, Reg. No. 26213; NEWMAN, Mark M., Reg. No. 31472; LAZARUS, Richard B., Reg. No. 48215; KRINSKY, Richard P., Reg. No. 47720; GILLENWATER, Bobby B., Reg. No. 31105; COOPER, Gregory S., Reg. No. 40965; DONOVAN, Thomas J., Reg. No. 33231; MARTIN, Alice O., Reg. No. 35601; PETERS, Grant H., Reg. No. 35977; HAMILL, Mark A., Reg. No. 37145; ALLEN, Michael B., Reg. No. 37582; and ALBERS, Daniel P., Reg. No. 44008; All Appointed Agents of the Address: BARNES & THORNBURG, 11 South Meridian Street, Indianapolis, IN 46204, US

to represent the undersigned before

all the competent International Authorities

the International Searching Authority only

the International Preliminary Examining Authority only

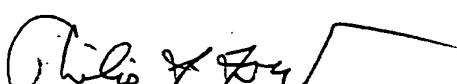
in connection with any and all international applications filed by the undersigned with the following Office

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and to make or receive payments on behalf of the undersigned.

Signature(s) (where there are several persons, each of them must sign; next to each signature, indicate the name of the person signing and the capacity in which the person signs, if such capacity is not obvious from reading this power):

  
Philip Stewart LOW

Date: 9 5 2002  
Day/ Month/ Year

# PCT

## GENERAL POWER OF ATTORNEY (for several international applications filed under the Patent Cooperation Treaty) (PCT Rule 90.5)

The undersigned person(s) :

*(Family name followed by given name; for a legal entity, full official designation. The address must include postal code and name of country.)*

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50 Bridgewater Court, Apt. 7  
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Signature(s) *(where there are several persons, each of them must sign; next to each signature, indicate the name of the person signing and the capacity in which the person signs, if such capacity is not obvious from reading this power):*

Bindu VARGHESE

Date:

Day/ Month/ Year